

1. A method of operating a communication system, the method comprising:
 - transferring a dial tone from a bearer interface for a caller;
 - receiving Dual Tone Multi-Frequency (DTMF) signals from the caller into the bearer interface;
 - processing the DTMF signals in the bearer interface to determine a called number;
- 5 transferring a first message indicating the called number from the bearer interface to a processing system;
 - processing the called number in the processing system to select an identifier;
 - transferring a second message indicating the identifier from the processing system to the bearer interface; and
- 10 receiving the user communications into the bearer interface, and in response to the second message, converting the user communications into a packet format including the identifier and transferring the user communications in the packet format including the identifier to a communication network, wherein the communication network routes the user communications based on the identifier.
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 2. The method of claim 1 further comprising providing echo cancellation in the bearer interface.
 3. The method of claim 1 further comprising providing compression for the user communications in the bearer interface.
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 4. The method of claim 1 further comprising providing voice detection in the bearer interface.
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 5. The method of claim 1 further comprising providing voice messaging in the bearer interface.
 6. The method of claim 1 further comprising providing ringback in the bearer interface.

7. The method of claim 1 wherein the receiving the user communications comprises receiving the user communications in a GR-303 format.

8. The method of claim 1 wherein the processing system not in a telecommunication switch.

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9. The method of claim 1 wherein the identifier comprises an asynchronous transfer mode virtual identifier.

10. The method of claim 1 wherein processing the called number to select the identifier
10 comprises sending a signaling message to a network element.

11. A communication system comprising:

a bearer interface configured to transfer a dial tone for a caller, receive Dual Tone Multi-Frequency (DTMF) signals from the caller, process the DTMF signals to determine a called number, and transfer a first message indicating the called number;

5 a processing system configured to process the called number to select an identifier and transfer a second message indicating the identifier; and

wherein the bearer interface is further configured to receive the second message and the user communications, and in response to the second message, convert the user communications into a packet format including the identifier and transfer the user communications in the packet 10 format including the identifier to a communication network, wherein the communication network routes the user communications based on the identifier.

12. The communication system of claim 11 wherein the bearer interface is configured to provide echo cancellation.

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13. The communication system of claim 11 wherein the bearer interface is configured to provide compression for the user communications.

14. The communication system of claim 11 wherein the bearer interface is configured to provide 20 voice detection.

15. The communication system of claim 11 wherein the bearer interface is configured to provide voice messaging.

16. The communication system of claim 11 wherein the bearer interface is configured to provide ringback.
17. The communication system of claim 11 wherein the bearer interface is configured to receive 5 the user communications in a GR-303 format.
18. The communication system of claim 11 wherein the processing system not in a telecommunication switch.
- 10 19. The communication system of claim 11 wherein the identifier comprises an asynchronous transfer mode virtual identifier.
20. The communication system of claim 11 wherein the processing system is configured to send 15 a signaling message to a network element when processing the called number to select the identifier.